

### REMARKS

Claims 1-4, 6-11, 13, 14 and 16-20 are pending. By this Amendment, claims 1-4, 6, 9-11, 13, 14 and 20 are amended. Reconsideration and allowance in view of the following remarks are respectfully requested.

Claims 1-4, 6-11, 13, 14, 16-18 and 20 were rejected under 35 U.S.C. § 102(b) over Kuroki (Japanese Patent Application Publication 2001-338673). The rejection is respectfully traversed.

Claim 1 recites fuel cell arrangement comprising several individual components arranged in a stack. The individual components comprise at least a first electrode, the first electrode being comprised of first and second stacked plates having contacting surfaces and oppositely facing surfaces. The first and second stacked plates directly contact one other and are at least partially joined to one another by a common seal element of polymer material which is injected onto the first and second plates to form a module. Each of the first and second plates is provided with an opening and the seal element extends through the opening in each of the first and second plates. A respective catalyst plate contacts the oppositely facing surface of each of the first and second plates.

Claim 6 recites a module for a fuel cell arrangement comprising at least a first electrode, the first electrode being comprised of first and second stacked plates having contacting surfaces and oppositely facing surfaces and forming a stack, the first and second stacked plates directly contacting each other, with a common seal element of polymer material which is injected onto the first and second stacked plates and by which the first and second stacked plates are at least partially joined to one another, each of the first and second stacked plates forming the stack being

provided with an opening and the common seal element extending through the opening in each of the two stacked plates, and a respective catalyst plate contacting the oppositely facing surface of each of the first and second plates.

Claim 20 recites process for producing a module for a fuel cell arrangement, comprising inserting at least portions of first and second plates having contacting surfaces and oppositely facing surfaces into a casting mold, each of the first and second plates being provided with an opening; filling the casting mold with a polymer seal material so that the seal material adjoins the first and second plates and extends through the opening in each of the first and second plates to form a module for a fuel cell in which the first and second plates directly contact one another and together form a single electrode of the module for the fuel cell arrangement; and contacting each oppositely facing surface with a respective catalyst plate.

As shown, for example, in Figure 2 of the instant application, the fuel cell arrangement includes the catalyst plates 4 and 6. The electrodes 3 are in contact with the catalyst plates 4 and 6. Each electrode 3 is comprised of the plates 7 and 8. The plates 7 and 8 have oppositely facing surfaces. A respective catalyst plate 4, 6 contacts each oppositely facing surface of the plates.

Kuroki discloses a reaction polar zone 3 that has includes catalyst plates 5 and 6. Each catalyst plate 5 and 6 is in contact with a separator plate 1 and 2, respectively. However, neither separator plate 1 or 2 comprises first and second stacked plates directly contacting each other. Each separator plate 1, 2 is formed as a single plate and there is no disclosure or suggestion by Kuroki of forming the separator plates 1 and 2 of first and second stacked plates.

Moreover, in a fuel cell constructed according to the structure of Kuroki, the oppositely facing surfaces of the separator plates 1 and 2 would contact another separator plate (as the fuel cell would include a plurality of the structures shown in Figure 1 of Kuroki arranged in a stack). The oppositely facing surfaces of the separator plates 1 and 2 would not contact respective catalyst plates, as recited in claims 1, 6 and 20.

As Kuroki does not disclose or suggest the each and every feature of claims 1, 6 and 20, Kuroki cannot anticipate or render obvious the claims.

Claims 2-4, 7-11, 13, 14 and 16-18 recite additional features of the invention and are allowable for the reasons discussed above with respect to claims 1 and 6 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection over Kuroki are respectfully requested.

Claims 1, 6 and 20 were rejected under 35 U.S.C. §102(b) over Barton et al. (WO 99/04446). The rejection is respectfully traversed.

The flow field plates 200 of Barton et al. are not each formed of first and second stacked plates, as recited in claims 1, 6 and 20. Furthermore, Barton et al. do not disclose or suggest filling a casting mold with a polymer seal material so that the seal material adjoins flow field plates, as recited in claim 20.

Barton et al. also do not disclose or suggest a seal element that extends through an opening in each of the flow field plates 200. The sealant material 125 does not extend through an opening in each flow field plate. The sealant material 125 is impregnated into a portion 150 of the electrode layers 140. See page 11, lines 20.

Reconsideration and withdrawal of the rejection over Barton et al. are respectfully requested.

Claims 1 and 6 were rejected under 35 U.S.C. § 102(b) over the admitted prior art of paragraph [0005]. The rejection is respectfully traversed.

Applicants assume that claims 1 and 6 are rejected over European Patent Application Publication 1 032 065 A2, (Schilling et al.) which is discussed in paragraph [0005].

It is respectfully noted that European Patent Application Publication 1 032 065 A2 is in German. However, European Patent Application Publication 1 032 065 A2 corresponds to U.S. Patent 6,338,492. The following remarks refer to U.S. Patent 6,338,492.

Schilling et al. disclose a membrane electrode assembly (MEA) 4 sealed between bipolar plates 2 and 3 by sealing elements 10 which are placed in the grooves 9 of the plates 2 and 3. See column 4, lines 3-6. The bipolar plates 2 and 3 include holes 19 and bore holes 20 to form stoppers 21 which reliably retain the sealing elements 10 on the plates 2 and 3. See column 4, lines 23-35 and Figures 4a and 4b.

The bipolar plates 2 and 3 of Schilling et al. do not each comprise first and second stacked plates, as recited in claims 1 and 6. The opposing surfaces of the plates 2 and 3 do not contact respective catalyst plates. Instead, the opposing surface of the plate 2 contacts the opposing surface of the plate 3, and vice versa. See Figure 2 of Schilling et al.

Reconsideration and withdrawal of the rejection over the admitted prior art (Schilling et al.) are respectfully requested.

Claims 16-19 were rejected under 35 U.S.C. §103(a) over Kuroki and/or the admitted prior art (Schilling et al.) in view of Barton et al. The rejection is respectfully traversed.

As neither Kuroki, Schilling et al., nor Barton et al. disclose or suggest the features discussed above with respect to claim 6, even assuming it would have been obvious to combine the references, the combination would not include all the features of claim 6. There is also no teaching, suggestion, or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to combine the references. Therefore, the combination of Kuroki and/or Schilling et al. and Barton et al. does not present a *prima facie* case of obviousness. See MPEP §2143.

In view of the above arguments, it is respectfully submitted that all of the claims are allowable and the entire application is in condition for allowance.

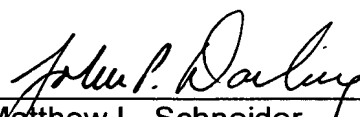
Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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